



SUCCESS STORIES



Western Bark Beetle Initiative

Region 5

File Code 3420

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Maintaining Recreation Values: High-value tree protection to combat bark beetles in Crystal Lake Campground

For several years, bark beetle-caused tree mortality has occurred in Crystal Lake Campground on the Angeles National Forest, San Gabriel Ranger District. The campground is nestled within a mixed conifer forest and adjacent to Crystal Lake, one of the few naturally formed lakes in southern California. Crystal Lake has been a popular camping and hiking destination for decades. The campground is also one of the largest in the Angeles National Forest.

Western pine beetle is a native insect that commonly kills two species of pines throughout southern California. It is an aggressive bark beetle that favors mature ponderosa pine, which is one of the dominant canopy tree species found in Crystal Lake Campground. Western pine beetle can aggregately attack pines, overcoming host defenses and ultimately causing tree mortality. Since 2008, western pine beetle has killed many large diameter, high-value ponderosa pines that surrounded camp sites and picnic tables. Pine mortality could increase dramatically from bark beetle attacks within the campground if drought conditions were to occur in the region.



Ponderosa pines killed by western pine beetle in Crystal Lake



Crystal Lake



Old and recent tree mortality caused by bark beetles

Forest Health Protection worked collaboratively with the San Gabriel Ranger District to prevent additional losses to the pine component and maintain the aesthetic beauty of the campground. In 2009, the Western Bark Beetle Initiative (WBBi) assisted the Ranger District by funding the forest planning to save these valuable trees. Additional funding was provided to the Ranger District in 2010 from the WBBi program to implement the high-value tree protection. Ponderosa pines susceptible to western pine beetle attack were treated with a preventive insecticide along the main stem. A total of \$74,000 was used to treat approximately 200 trees in the campground. These preventive applications can provide two years of protection against bark beetle attacks and will help sustain recreational activities in the campground.



Spraying high-value trees to prevent bark beetle attack.

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